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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,242	04/24/2001	Jeffrey Richard Conrad	10006621-017	3491

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HEWLETT-PACKARD COMPANY  
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EXAMINER

PHAN, TAM T

ART UNIT	PAPER NUMBER
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2144

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/840,242

Applicant(s)

CONRAD ET AL.

Examiner

Tam (Jenny) Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06/15/2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/15/2005 has been entered. Claims 1 and 9 are currently amended. Claims 17-18 are cancelled.
2. Claims 1-16 are presented for examination.

### ***Priority***

3. No priority claims have been made.
4. The effective filing date for the subject matter defined in the pending claims in this application is 04/24/2001.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 5-9, and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pithawala et al. (U.S. Patent Number 6,747,957), hereinafter referred to as Pithawala, in view of Trofin et al. (U.S. Patent Number 6,661,778), hereinafter referred to as Trofin.

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7. Regarding claim 1, Pithawala disclosed a method of managing a network comprising: transmitting a signal from a network manager to each of plural nodes to determine the availability of each node (Title, Abstract, column 3 lines 3-15); determining a response time of each node using the signal (column 8 lines 30-38; column 11 lines 24-43); and relaying the response time of each node to a database of the network manager (column 8 lines 29-38, column 11 lines 4-13, lines 27-42), wherein the response time is updated based on a regular interval (column 6 lines 54-65, column 8 lines 29-38, column 11 lines 28-43).

8. Pithawala taught the invention substantially as claimed. However, Pithawala did not expressly teach updating the response time based on the node priority.

9. Pithawala suggested exploration of art and/or provided a reason to modify the method of managing a network with additional features such as monitoring network availability based on network node priority (column 12 lines 1-14).

10. Trofin disclosed a method for statistical collection in a data communication network by polling the status of the nodes using various proprietary protocols (i.e. SNMP, ICMP), commonly used for polling nodes with in the network (Abstract, column 3 lines 9-15) comprising: sending monitoring packets to each of plurality of nodes wherein monitoring packets are issued more frequently to high priority nodes and less frequently to low priority nodes (column 3 lines 26-34, column 3 line 54-column 4 line 11); receiving a response from each of the plurality of nodes (column 3 lines 26-34, line 54-column 4 line 11); determining status information for each node(column 3 line 54-column 4 line 11); and storing the status information in a database wherein the status

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information is updated based on the node priority (column 3 line 54-column 4 line 11, column 8 lines 36-44, column 9 lines 7-18).

11. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of Pithawala with the teachings of Trofin to updating the response time based on a node priority in order to detect variations in the functionality of high priority nodes quickly since high priority nodes may be polled more often (Trofin, column 8 lines 36-44).

12. Regarding claim 5, Pithawala disclosed a method wherein the signal is an Internet Control Message Protocol (ICMP) echo request and an ICMP echo reply (Abstract, column 3 lines 3-15, column 6 line 57 - column 7 line 7).

13. Regarding claim 6, Pithawala disclosed a method wherein the plural nodes comprise substantially all nodes of the network (column 1 line 61-column 2 line 3).

14. Regarding claim 7, Trofin disclosed a method comprising designating at least one of the plural nodes as one of a high priority node and a low priority node; and transmitting the signal to each high priority node more frequently than the signal is transmitted to each low priority node (column 3 lines 54-67, column 4 lines 14-21, lines 25-37, column 8 lines 36-44).

15. Regarding claim 8, Pithawala disclosed a method wherein the network manager is a Network Node Manager (column 3 lines 39-53).

16. Regarding claims 9 and 13-16, the computer-based system for managing a network corresponds directly to the method of claims 1 and 5-8, and thus these claims are rejected using the same rationale.

17. Since all the limitations of the claimed invention were disclosed by the combination of Pithawala and Trofin, claims 1, 5-9, and 13-16 are rejected.

18. Claims 2-4 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pithawala et al. (U.S. Patent Number 6,747,957), hereinafter referred to as Pithawala, in view of Trofin et al. (U.S. Patent Number 6,661,778), hereinafter referred to as Trofin, and further in view of Forman et al. (U.S. Patent Number 6,178,449), hereinafter referred to as Forman.

19. Regarding claim 2, Pithawala disclosed a method of managing a network comprising: transmitting a signal from a network manager to each of plural nodes to determine the availability of each node (Title, Abstract, column 3 lines 3-15); determining a response time of each node using the signal (column 8 lines 30-38, column 11 lines 24-43); and relaying the response time of each node to a database of the network manager (column 8 lines 29-38, column 11 lines 4-13, lines 27-42), wherein the response time is updated based on a regular interval (column 6 lines 54-65, column 8 lines 29-38, column 11 lines 28-43); and Trofin disclosed storing the status information in a database wherein the status information is updated based on the node priority (column 3 line 54-column 4 line 11, column 8 lines 36-44, column 9 lines 7-18).

20. The combination of Pithawala and Trofin taught the invention substantially as claimed. However, the combination of Pithawala and Trofin did not expressly teach receiving the response time of each node in a standard format; and reformatting the response time of each node into a flat file format prior to relaying the response time of each node to the database.

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21. Pithawala suggested exploration of art and/or provided a reason to modify the method of managing a network with the flat file format feature (column 11 lines 28-43).

22. Forman disclosed receiving the response time of each node in a standard format; and reformatting the response time of each node into a flat file format prior to relaying the response time of each node to the database (Figure 4, column 5 lines 37-52, column 7 line 60-column 8 line 6).

23. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the combined method of Pithawala and Trofin with the teachings of Forman to include the flat file format feature historical log files are typically flat files, and data is written to and read from these files by programs on the local system or remote systems using standard file input/output operations and remote file transfer mechanisms (Forman, column 5 lines 37-52).

24. Regarding claim 3, Pithawala and Forman combined disclosed a method wherein the flat file format comprises: a start time of the response time and a sampling interval; an end time of the sampling interval; the response time in milliseconds; and a node identification number (Pithawala, Figure 7, column 6 line 57 - column 7 line 7, column 7 lines 54-62, column 8 lines 9-19, lines 30-38; Forman, Figures 4 & 7, column 5 lines 37-52, column 7 line 60 - column 8 line 6).

25. Regarding claim 4, Pithawala disclosed a method wherein the node identification number is an IP address (Figure 7, column 9 lines 60-65, column 11 lines 53-67).

26. Regarding claims 10-12, the computer-based system for managing a network corresponds directly to the method of claims 2-4, and thus these claims are rejected using the same rationale.

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27. Since all the limitations of the claimed invention were disclosed by the combination of Pithawala, Trofin, and Forman, claims 2-4 and 10-12 are rejected.

28. Claims 1, 5-9, and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevenson et al. (U.S. Patent Number 6,704,284), hereinafter referred to as Stevenson, in view of DeLuca et al. (U.S. Patent Number 6,792,455), hereinafter referred to as Deluca.

29. Regarding claim 1, Stevenson disclosed a method of managing a network comprising: transmitting a signal from a network manager to each of plural nodes to determine the availability of each node; determining a response time of each node using the signal; and relaying the response time of each node to a database of the network manager (Title, column 3 line 63-column 4 line 21, column 4 lines 48-55, column 5 lines 1-27, column 5 line 63-column 6 line 7).

30. Stevenson taught the invention substantially as claimed. However, Stevenson did not expressly teach updating the response time based on the node priority.

31. Stevenson suggested exploration of art and/or provided a reason to modify the method of managing a network with additional features such as monitoring network availability based on network node priority (column 10 lines 26-35).

32. DeLuca disclosed a polling method for collecting client management data from a number of computer nodes wherein the polling agent collect performance data and forward the data to the network manager database, the performance data is updated based on a computer node priority (Title, Abstract, column 4 lines 26-35, column 9 lines 8-21, column 10 line 66-column 11 line 10, column 11 lines 21-53).



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33. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of Stevenson with the teachings of DeLuca to updating the response time based on a node priority in order distinguish between critical nodes and non-critical nodes (column 4 lines 31-35) since polling agents have the ability to limit the transmission of low priority data (column 11 lines 36-37).

34. Regarding claim 5, Stevenson disclosed a method wherein the signal is an Internet Control Message Protocol (ICMP) echo request and an ICMP echo reply (column 4 lines 48-55).

35. Regarding claim 6, Stevenson disclosed a method wherein the plural nodes comprise substantially all nodes of the network (column 3 line 63-column 4 line 21).

36. Regarding claim 7, Deluca disclosed a method comprising designating at least one of the plural nodes as one of a high priority node and a low priority node; and transmitting the signal to each high priority node more frequently than the signal is transmitted to each low priority node (column 9 lines 8-21, column 10 line 66-column 11 line 10, column 11 lines 21-53).

37. Regarding claim 8, Stevenson disclosed a method wherein the network manager is a Network Node Manager (column 1 lines 33-42, column 4 lines 46-55).

38. Regarding claims 9, and 13-16, the computer-based system for managing a network corresponds directly to the method of claims 1 and 5-8, and thus these claims are rejected using the same rationale.

39. Since all the limitations of the claimed invention were disclosed by Stevenson and DeLuca, claims 1, 5-9, and 13-16 are rejected.

***Response to Arguments***

40. Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

41. In response to applicant's argument that "the Stevenson patent does not disclose relaying the response time of each node to a database", the Examiner respectfully disagrees. Stevenson disclosed, "Each managed device includes a processor which monitors and stores data in memory on the device, and such data may be represented to an external management station by a MIB (management information base), as is well known in the art, including data relating to inter alia data traffic at the device..." (column 3 line 67-column 4 lines 5), it is submitted that although Stevenson did not describe in details the forwarding of the time taken to receive a response from the device to a database since this feature was well known in the art, Stevenson disclosed the use of remote management information base to store monitoring data. Thus, it should be obvious that the monitoring data or the time taken to receive a response from the device would need to be forwarding to the remote management information base for storage purposes.

42. As the rejection reads, Examiner asserts that the combination of these teachings render the claimed invention obvious.

***Conclusion***

43. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 for details.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam (Jenny) Phan whose telephone number is (571) 272-3930. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Tam T. Phan  
July 30, 2005

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